# [CLAIMS]

# [Claim 1]

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An antistatic adhesive tape comprising a base film and, on one surface of the base film, either a conductive polymer-based conductive layer and an adhesive layer formed on the conductive layer, or a layer formed of a mixture of a conductive polymer and an adhesive layer.

# [Claim 2]

An antistatic adhesive tape with antistatic and hard coating properties, which comprises a base film and, on one surface of the base film, either a layer formed by hard-coating a mixture of a conductive polymer and a UV curing agent, or a conductive polymer-based conductive layer and a UV curing layer on the conductive layer as a protective layer.

# [Claim 3]

The antistatic adhesive tape of Claim 1, which further comprises a conductive polymer-based antistatic layer on the opposite surface of the base film.

# 20 [Claim 4]

The antistatic adhesive tape of Claim 3, wherein in order to impart a hard coating property to the antistatic layer on the opposite surface, a UV curing agent is coated

on the antistatic layer to form a protective layer, or the antistatic layer is formed by hard-coating a mixture of a conductive polymer and a UV curing agent.

# [Claim 5]

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A method for producing an adhesive tape, which comprises, on one surface of a base film, either forming a conductive polymer-based antistatic layer and then applying an adhesive agent on the formed antistatic layer, or applying a mixture of a conductive polymer and an adhesive agent.

# [Claim 6]

A method for producing an antistatic adhesive tape, which comprises, on one surface of a base film, either forming a conductive polymer-based antistatic layer and then forming a protective layer formed of a curing agent containing a UV-curable binder, or hard-coating a mixture of a conductive polymer and a UV-curable binder, so as to impart antistatic and hard coating properties to the tape.

# [Claim 7]

20 The method of Claim 5, which additionally comprises forming a conductive polymer-based antistatic layer on the opposite surface of the base film.

# [Claim 8]

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The method of Claim 7, which comprises, on the antistatic layer formed on the opposite surface, either forming a protective layer formed of a UV-curing agent containing a UV-curable binder, or hard-coating a mixture of a curing agent, a conductive polymer and a UV-curable binder, so as to impart a hard coating property to the antistatic layer.

#### [Claim 9]

The method of Claim 7, wherein in order to form the protective layer on the antistatic layer on the opposite surface, a heat-curable binder and a curing agent are added to the conductive polymer, or the conductive polymer is applied on the antistatic layer and then a heat-curable coating agent containing a heat-curable binder is applied.

# [Claim 10]

The method of Claim 8 or 9, wherein the heat-curable binder or the UV-curable binder contains a component with a release property.

# 20 [Claim 11]

The method of any one of Claims 7 to 9, wherein a surfactant with a release property is used in the antistatic layer on the opposite surface so that an

adhesive agent does not adhere to the antistatic layer.

# [Claim 12]

The method of any one of Claims 5 to 8, wherein the conductive polymer is selected from the group consisting of polythiophene, polyaniline, polypyrrole, and 3,4-polyethylenedioxythiophene, and derivatives thereof.

# [Claim 13]

The method of any one of Claims 5 to 8, wherein the antistatic layer is formed by coating a composition containing a conductive polymer solution and a binder as main components the one surface of the base film.

# [Claim 14]

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The method of any one of Claims 5 to 8, wherein the antistatic layer is formed by polymerizing a mixture of monomers, an oxidizing agent and a dopant directly on the base film so as to synthesize a conductive polymer.

#### [Claim 15]

The method of any one of Claims 5 to 8, wherein the antistatic layer is formed by a vapor phase polymerization method in which an oxidizing agent and a dopant are coated on the base film, and then vapor phase monomers are brought into contact with the coated materials.

# [Claim 16]

The method of any one of Claims 5, 7 and 8, wherein the adhesive agent is coated in a thickness of 0.001-30  $\mu m.$ 

# [Claim 17] .

The method of any one of Claims 5 to 8, wherein the base film is made of a polymer selected from polyethylene, polyester, polyimide, polystyrene, polyether, polyethersulfone, polyacryl (methacryl), cellulose polymers, cyclic olefin polymers and copolymers thereof.

# 10 [Claim 18]

An adhesive tape produced by a method set forth in any one of Claims 5 to 8.

# [Claim 19]

The adhesive tape of Claim 18, which further comprises an antistatic treated release film attached to one surface of the tape.

# [Claim 20]

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A film with a permanent antistatic property for protecting electronic parts, such as LCDs, which is produced using the tape of Claim 18.